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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Tomonari Sugata

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EXAMINER

GIRMA, FEKADESELEASS

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/586,794	Applicant(s) SUGATA ET AL.	
	Examiner Fekadeselassie Girma	Art Unit 2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 January 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 July 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>16 January 2009, 20 July 2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-11 are currently pending in the application.

Objection to Abstract

2. The abstract of the disclosure is objected to because the abstract consists of multiple paragraphs. Correction is required. See MPEP § 608.01(b).

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 11 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as

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the invention.

In claim 11, the limitation, “first identification is a short range communication RFID, capable of transmitting and receiving a signal between the short range communication RFID and the long-range communication RFID”, does not specifically identify if the communication is a short range, or a long range. The limitation in between a short and long range does not give a positive limitation. The limitation should specifically describe the communication range of the first identification medium to either short range or long range. Appropriate correction required.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-5, 7, 8, 10, 16 and 19 - 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Motoshige (JP 2002-125721) in view of Jesser (US 7075435).

As to claim 1, Motoshige discloses, in pull tag of slide fastener 4, having claimed: an article equipped with a first identification medium met by IC chip (¶ 0004). Motoshige does not explicitly disclose a removable RFID tag.

However, Jesser, in the same field of endeavor, teaches the article is further equipped with a second identification medium removably read on Col. 2, Lines 39-49. The artisan recognizes the obviousness of RFID tag member, the tag member including a second substrate having first and second surfaces and at least one RFID tag disposed on the second substrate first

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surface, the second substrate second surface being removably secured to one of the first substrate surfaces proximate the passive loop, the RFID tag being magnetically coupled to the passive loop and having a first operating frequency. Tag 10 is to be removed from the substrate 30 and secured to an article, such as a product or product container. Thus, information and data acquired during packaging, inventory or transport remains with the article through subsequence processes or use.

Therefore it would have been obvious to one ordinary skill in the art at the time of invention to incorporate the RFID tag assembly and system of Jesser into Motoshige in order to provide means for tracking a product or other article after removal from a transport medium.

As to claim 2, Motoshige further teaches the first identification medium is disposed in a fastening product read on to be attached to the article read on ¶ 0004.

As to claim 3, the claim is interpreted and rejected as to claim 1.

As to claim 4, Jesser further teaches the identification medium is removably attached to a pull tab of the slide fastener read on Col. 2, Lines 39-49. The artisan recognizes the obviousness of RFID tag member, the tag member including a second substrate having first and second surfaces and at least one RFID tag disposed on the second substrate first surface, the second substrate second surface being removably secured to one of the first substrate surfaces proximate the passive loop, the RFID tag being magnetically coupled to the passive loop and having a first operating frequency. Tag 10 is to be removed from the substrate 30 and secured to an article, such as a product or product container. Thus, information and data acquired during packaging, inventory or transport remains with the article through subsequence processes or use.

Therefore it would have been obvious to one ordinary skill in the art at the time of

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invention to incorporate the RFID tag assembly and system of Jesser into Motoshige in order to provide means for tracking a product or other article after removal from a transport medium.

As to claim 5, Jesser further teaches identification medium is arranged in a tag to be attached to the article read on Col. 2, Lines 47-49. The artisan recognizes the obviousness of RFID tag member includes a second substrate having first and second surfaces and at least one RFID tag disposed on the second substrate first surface, the second substrate second surface being removably secured to one of the first substrate surfaces proximate the passive loop, the RFID tag being magnetically coupled to the passive loop and having a first operating frequency. Tag 10 is to be removed from the substrate 30 and secured to an article, such as a product or product container. Thus, information and data acquired during packaging, inventory or transport remains with the article through subsequence processes or use.

Therefore it would have been obvious to one ordinary skill in the art at the time of invention to incorporate the RFID tag assembly and system of Jesser into Motoshige in order to provide means for tracking a product or other article after removal from a transport medium.

As to claim 7, Motoshige further discloses an identification medium for commodity distribution control read on ¶ 0003.

As to claim 8, the claim is interpreted and rejected as to claim 1.

As to claim 10, Jesser further teaches the second identification medium is a long-range communication RFID read on Col. 2, Lines 42-46. The artisan recognizes the obviousness of RFID tag is disposed proximate and in communication with a larger passive loop (i.e., antenna means) that significantly extends the operating range and reduces orientation sensitivity of the tag. Removable antennas are commonly used to provide a RFID tag assembly and system to

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extend the operating range and reduce orientation sensitivity of a conventional RFID tag.

Therefore it would have been obvious to one ordinary skill in the art at the time of invention to incorporate the RFID tag assembly and system of Jesser into Motoshige in order to provide a RFID tag assembly and system to extend the operating range and reduce orientation sensitivity of a conventional RFID tag.

As to claim 16, Motoshige further discloses commodity distribution control on the article is carried out based on data directly or indirectly read out from a memory of the second identification medium and/or data written into the memory read on ¶ 0015.

As to claim 19, Jesser further teaches removed second identification medium is used as a second identification medium for another new article read on Col. 4, Lines 17-26. The artisan recognizes the obviousness of the product, such as the computer 50 illustrated in FIG. 6, is removed from the shipping container 40, the tag assembly 34 is removed from the substrate 30 of the container and placed on the product 50. Thus, any data or information acquired while the product 50 is in the shipping container 40 remains with the product 50 throughout its lifetime.

Therefore it would have been obvious to one ordinary skill in the art at the time of invention to incorporate the RFID tag assembly and system of Jesser into Motoshige in order to provide any data or information acquired while the product 50 is in the shipping container 40 remains with the product 50 throughout its lifetime.

As to claim 20, the claim is interpreted and rejected as to claim 1 & 16.

As to claim 21, the claim is interpreted and rejected as to claim 1 & 16.

7. Claims 6, 17, and 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over

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Motoshige in view of Jesser and further in view of Amtmann (US 2005/0212662).

As to claim 6, Motoshige in view of Jesser discloses all claim limitation except true false decision. However, Amtmann, in the same field of endeavor, teaches the first identification medium is an identification medium for true-false decision read on ¶ 0042. The artisan recognizes the obviousness of set a transponder is set from an initial state to a first safety state. In the block 230 a bit of the memory section 62 for storing a first safety state information is set to logic "1" (TRUE) and hence the transponder is set from an initial state to a first safety state. Subsequently, the procedure is continued in the block 205. It is to be noted that the first safety state information may also be stored in the memory section 62 in the form of a plurality of bits. The measure and threshold value for a given quantization level is selected by analyzing the results of encoding and decoding frames using that quantization level.

Therefore it would have been obvious to one ordinary skill in the art at the time of invention to incorporate the Method of securing a deactivation of a rfid transponder of Amtmann into Motoshige in order to make a decision whether threshold value corresponding to the quantization level is above or lower than the measured value.

As to claim 17, the claim is interpreted and rejected as to claim 6.

As to claim 18, the claim is interpreted and rejected as to claim 6.

8. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Motoshige in view of Jesser and further in view of Hum (US 2003/0122655).

As to claim 9, Motoshige in view of Jesser discloses all claim limitation except actuating in different frequencies. However, Hum, in the same field of endeavor, teaches the identification

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medium is a short-range communication RFID, that is actuated with a frequency different from that of the short-range communication RFID read on ¶ 0027. The artisan recognizes the obviousness of using multiple frequencies to enable communications between the interrogator and selected RFID transponders associated with the selected frequency. Using different frequencies for different RFID transponders will prevent having all transponders in the system respond at the same time so that the system will have signal congestion and also it will allow the system to use only selected RFID transponders to receive and transmit certain information while the others stay quite.

Therefore it would have been obvious to one ordinary skill in the art at the time of invention to incorporate the Short range communication system of Hum into Motoshige in view of Jesser in order to prevent having all transponders in the system respond at the same time and prevent signal congestion and also it will allow the system to use only selected RFID transponders to receive certain information while the others stay quite.

9. Claims 11-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Motoshige in view of Jesser and further in view of Takeda (JP 02003218624A).

As to claim 11, Motoshige in view of Jesser discloses all claimed limitations except transmitting and receiving short range and long range signal.

However, Takeda, in the same field of endeavor, teaches transmitting and receiving short and long range communication RFID read on ¶ 0004 and ¶ 0005. The artisan recognizes the obviousness of the signal transduction distance by an IC card tended to be insufficient, since the antenna of the IC chip was formed very small based on a conventional technology. The booster

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antenna for IC cards which can aim at expansion of signal transduction distance by providing the booster antenna which carries out inductive coupling to the antenna of an IC chip.

Therefore it would have been obvious to one ordinary skill in the art at the time of invention to incorporate the booster antenna for IC card of Takeda into Motoshige in view of Jesser in order to provide an IC card with both short and long range communication medium.

As to claim 12, Takeda further teaches the short-range communication RFID has an antenna connecting terminal for long-range communication, and an antenna for long-range communication is removably connected to the antenna connecting terminal read on ¶ 0024 & ¶ 0025. The artisan recognizes the obviousness of booster antennas constitutes secondary coil antennas to enhance the signal reception capability of wireless transmission or reception. Inductive coupling of the exiting antenna is carried out to the antenna of IC chip, and the series connection of the booster antenna L2 is carried out to the exiting antenna L1 via detour pattern B-2 of the outside of the jumper line B1 and the booster coil L2, and the jumper line B3 with the capacitor C. However, the numerals M of drawing 2 show the inductive coupling of the antenna.

Therefore it would have been obvious to one ordinary skill in the art at the time of invention to incorporate the booster antenna for IC card of Takeda into Motoshige in view of Jesser in order to provide a booster coil which can operate as an external antenna of an IC chip via an exiting coil, it has the outstanding effect that the signal transduction distance of an IC card is expandable (¶ 0030).

As to claim 13, the claim is interpreted and rejected as to claim 12.

As to claim 14, the claim is interpreted and rejected as to claim 1.

As to claim 15, Motoshige in view of Jesser and further in view of Takeda discloses all

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claimed limitations except a battery is removably connected to the short-range communication RFID. Official notice is taken that the use of removable battery in active RFID technology is notoriously well known and expected in the art. It would have been obvious to have included a removable battery in Motoshige in view of Jesser and further view of Takeda as a removable battery is known to supply power to active RFID tag.

Therefore it would have been obvious to one ordinary skill in the art at the time of invention to incorporate the notoriously well known in the art into Motoshige in view of Jesser and further in view of Takeda in order to supply power to the RFID circuit.

10. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Motoshige in view of Jesser and further in view of Packer (US 20050057404).

As to claim 22, Motoshige in view of Jesser discloses and further in view of Takeda teaches all claim limitations except using the removed antenna for another new article.

However, Packer, in the same field of endeavor, teaches an antenna is removed from the article, the removed antenna is used as an antenna for long-range communication for another new article read on ¶ 0017. The artisan recognizes the obviousness of a detachable antenna module for attachment to a wireless communication device that has a built-in antenna. The detachable antenna module includes an external antenna, an activation control mechanism, and at least one attachment feature for removably attaching the antenna module to the communication device such that the antenna module and the communication device form a single mobile unit when attached. Note the detachable antenna module can be used on another article.

Therefore it would have been obvious to one ordinary skill in the art at the time of

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invention to incorporate the Detachable antenna module of Demicco into Motoshige in view of Jesser in order to provide external antennas which usually have higher gain than internal antennas. The higher gain of external antennas, which translates into increased coverage, particularly in fringe areas (i.e., areas where signal coverage is weaker).

Citation of Other Prior Arts

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Sugata discloses in Fastener and securment subject having the fastner secured there to, (US 2006/0290497), Higuchi discloses in Non-contact data carrier (US 20020121685), Colombo discloses in Self-registration systems and methods for dynamically updating information related to a network (US 7081808), Emura discloses in button for clothes with shank (JP 2002-042100), and Hatano discloses in Multi-directional RFID antenna (US 6069564).

Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fekadeselassie Girma whose telephone number is (571) 270-5886. The examiner can normally be reached on Monday thru Friday, 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel J. Wu can be reached on 571-272-2964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

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applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free)? If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/FG/

/Daniel Wu/
Supervisory Patent Examiner, Art Unit 2612